

KANSAS CITY DISTRICT
CORPS OF ENGINEERS
and the
LOWER CHARITON DRAINAGE DISTRICT

Public Law 84-99 of the Flood Control Act of 1944
Levee Rehabilitation – NEPA Review, Environmental
Assessment & Finding of No Significant Impact

LOWER CHARITON DRAINAGE DISTRICT, FEDERAL, EMERGENCY LEVEE REHABILITATION PROJECT

Missouri River Chariton County, Missouri

**May 2008** 



#### DEPARTMENT OF THE ARMY

KANSAS CITY DISTRICT, CORPS OF ENGINEERS 700 FEDERAL BUILDING KANSAS CITY, MISSOURI 64106-2896

## **DRAFT**Finding of No Significant Impact

Lower Chariton Drainage District Levee Rehabilitation Project Chariton County, Missouri

#### **Project Summary**

The U.S. Army Corps of Engineers, Kansas City District (CENWK), in cooperation with the project sponsor, Lower Chariton Drainage District, proposes to construct the Lower Chariton Drainage District Levee Rehabilitation Project under the authority of Public Law 84-99 of the Flood Control Act of 1944.

The proposed repairs are located in Chariton County, Missouri, near the town of Glasgow, along the right descending bank of the Little Chariton River from River Mile 5.0 to River Mile 0.36, upstream along the left descending bank of the Missouri River from River Mile 227.5 to River Mile 238.7, and upstream along the left descending bank of the Chariton River from River Mile 0.04 to River Mile 5.3.

Due to the limited damages to the Lower Chariton Levee caused by the declared flood event of 6 May 2007, two repair alternatives were considered: (1) In-Place Repairs and (2) No Action. The Corps has identified In-Place Repairs as the recommended alternative. The proposed project would involve repairing a riverside scour measuring approximately 1,000 feet long, 250 feet wide, and three feet deep near the levee toe, stations 665+00 to 685+00. The scour would be graded to the pre-flood ground elevation with compacted impervious material from a nearby borrow area. Sand deposits would be removed from the levee toe or graded to achieve proper drainage away from the levee toe. Levee slopes and disturbed areas would be seeded to reestablish the protective sod cover. Borrow would be obtained from riverward agricultural land damaged by the flood. Borrow would not be obtained from within existing adjacent scours, but scour edges would be excavated to enhance the hydrology and connectivity of scours and benefit the aquatic ecosystem.

#### **Alternatives**

Two alternatives were considered based on the type and severity of flood damage: (1) In-Place Repairs (**RECOMMENDED**) and (2) No Action.

#### Recommended Plan

The recommended repair action consists of in-place repair of a scour approximately 1,000 feet long, 250 feet wide, and three feet deep from station 665+00 to 685+00. The proposed project would involve repairing the scour by grading it to pre-flood ground elevations with compacted impervious material from a nearby borrow area, removing sand deposits from the levee toe or grading the deposits to achieve proper drainage away from the levee toe, and re-seeding levee slopes to repair the agricultural levee damaged by the declared flood event of 6 May 2007. Borrow would be obtained from riverward agricultural land damaged by the flood. Borrow would not be obtained from within existing adjacent scours, but scour edges would be excavated to enhance the hydrology and connectivity of scours and benefit the aquatic ecosystem.

#### **Summary of Environmental Impacts**

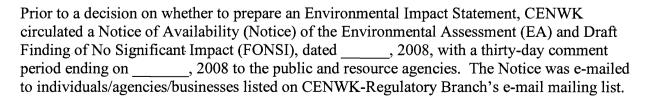
The flood risk management level achieved by the recommended plan would be the same as the original pre-flood condition. The recommended plan would result in no impacts to Federally-listed threatened or endangered species or their habitat. The recommended plan would result in no impacts to any properties listed, proposed for listing, eligible for listing, or potentially eligible for listing in the National Register of Historic Places. The recommended plan would result in no impacts to mitigable resources as defined in USACE planning regulations or under Section 404 of the Clean Water Act.

Areas of the existing levee sections damaged by flooding would be temporarily disturbed by the proposed construction activity. The adverse effects associated with the proposed project are short term/minor associated with project construction. These minor adverse effects would be greatly offset by restoring the flood risk management capability and its associated social and economic benefits of the existing levee system. Alternative 1, In-Place Repairs, meets the project purpose and need of rehabilitating the flood risk management capability and its associated social and economic benefits of the existing levee system. Of the two (2) alternatives considered, Alternative 1 is recommended because it is a prudent and economical repair alternative with a positive cost/benefit ratio and is consistent with protection of the nation's environment.

#### **Mitigation Measures**

The recommended plan will result in no impacts to mitigable resources as defined in USACE Planning regulations or under Section 404 of the Clean Water Act. Therefore, no mitigation measures are warranted or proposed.

#### **Public Availability**



The Notice informed these individuals that the EA and Draft FONSI were available on the CENWK webpage or that they could request a hard copy of the EA and Draft FONSI in order to provide comment.

Levee rehabilitation projects completed by the Corps under authority of Public Law 84-99 generally do not require the preparation of an Environmental Impact Statement. These projects typically result in long-term social and economic benefits and the adverse environmental effects are typically minor/long-term and minor/short-term construction related. The minor impacts associated with these projects are typically well outweighed by the overall long-term social and economic benefits of these projects. As described above, the recommended plan is consistent with this assessment of typical levee rehabilitation projects completed by the Corps under authority of Public Law 84-99 of the Flood Control Act of 1944.

#### Conclusion

After evaluating the anticipated environmental, economic, and social effects of the proposed activity, it is my determination that construction of the proposed Lower Chariton Drainage District Levee Rehabilitation Project does not constitute a major Federal action that would significantly affect the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

Date:	
	Roger A. Wilson, Jr.
	Colonel, Corps of Engineers
	District Commander



#### DEPARTMENT OF THE ARMY

KANSAS CITY DISTRICT, CORPS OF ENGINEERS 700 FEDERAL BUILDING KANSAS CITY, MISSOURI 64106-2896

#### **EXECUTIVE SUMMARY**

The U.S. Army Corps of Engineers, Kansas City District (CENWK), in cooperation with the project sponsor, Lower Chariton Drainage District, proposes to construct the Lower Chariton Drainage District Levee Rehabilitation Project, under the authority of Public Law 84-99 of the Flood Control Act of 1944. The Lower Chariton Drainage District levee segment consists of approximately 20 miles of earthen flood control works (FCW), seven miles of improved channel (2.64 miles on the Little Chariton River and 4.36 miles on the Chariton River), nine drainage structures, and three culverts along the right descending bank of the Little Chariton River from River Mile 5.0 to River Mile 0.36, upstream along the left descending bank of the Missouri River from River Mile 227.5 to River Mile 238.7, and upstream along the left descending bank of the Chariton River from River Mile 0.04 to River Mile 5.3 in Chariton County, near the town of Glasgow, Missouri. The FCW protects approximately 19,000 acres of agricultural land.

The proposed project to repair the agricultural levee damaged by the declared flood event of 6 May 2007 would involve repairing a riverside scour measuring approximately 1,000 feet long, 250 feet wide, and three feet deep near the levee toe from sta. 665+00 to 685+00. The scour would be graded to the pre-flood ground elevation with compacted impervious material from a nearby borrow area. Sand deposits would be removed from the levee toe or graded to achieve proper drainage away from the levee toe. Levee slopes and disturbed areas would be seeded to reestablish the protective sod cover upon project completion. Borrow would be obtained from riverward agricultural land damaged by the flood. Borrow would not be obtained from within existing adjacent scours. Scour edges would be excavated to enhance the hydrology and connectivity of scours and benefit the aquatic ecosystem.

Prior to a decision on whether to prepare an Environmental Impact Statement, the CENWK
circulated a Notice of Availability (Notice) of the Environmental Assessment (EA) and Draft
Finding of No Significant Impact (FONSI), dated, 2008, with a thirty-day comment
period ending on, 2008 to the public and resource agencies. The Notice was e-mailed
to individuals/agencies/businesses listed on the CENWK-Regulatory e-mail mailing list. The
Notice informed these individuals that the EA and Draft FONSI were available on the CENWk
webpage for review or that they could request the EA and Draft FONSI in writing, in order to
provide comment.

Additional information concerning this project may be obtained from Mr. Neil Bass, Environmental Resources Specialist, PM-PR, Kansas City District - U.S. Army Corps of Engineers, by writing the above address, or by telephone at 816-389-3146.

# NEPA REVIEW ENVIRONMENTAL ASSESSMENT &

#### DRAFT FINDING OF NO SIGNIFICANT IMPACT

#### PUBLIC LAW 84-99 LOWER CHARITON DRAINAGE DISTRICT LEVEE REHABILITATION PROJECT CHARITON COUNTY, MISSOURI

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# NEPA REVIEW ENVIRONMENTAL ASSESSMENT & DRAFT FINDING OF NO SIGNIFICANT IMPACT

#### PUBLIC LAW 84-99 LOWER CHARITON DRAINAGE DISTRICT LEVEE REHABILITATION PROJECT CHARITON COUNTY, MISSOURI

#### **Section 1: INTRODUCTION**

This Environmental Assessment provides information that was developed during the National Environmental Policy Act (NEPA) public interest review of the proposed Public Law 84-99 Lower Chariton Drainage District Levee Rehabilitation Project.

#### **Section 2: AUTHORITY**

The Kansas City District – U.S. Army Corps of Engineers (CENWK), in cooperation with the project sponsor, the Lower Chariton Drainage District, proposes to construct the Lower Chariton Drainage District Levee Rehabilitation Project under the authority of Public Law 84-99 of the Flood Control Act of 1944.

#### **Section 3: PROJECT LOCATION**

The Lower Chariton Drainage District levee consists of approximately 20 miles of earthen flood control works (FCW), seven miles of improved channel (2.64 miles on the Little Chariton River and 4.36 miles on the Chariton River), nine drainage structures, and three culverts. The Lower Chariton Drainage District is located in Chariton County, near the city of Glasgow, Missouri, along the right descending bank of the Little Chariton River from River Mile 5.0 to River Mile 0.36, upstream along the left descending bank of the Missouri River from River Mile 227.5 to River Mile 238.7, and upstream along the left descending bank of the Chariton River from River Mile 0.04 to River Mile 5.3 (see General Site Map, Appendix I).

#### Section 4: EXISTING CONDITION

The declared flood event on 6 May 2007 caused damages to the Lower Chariton Drainage District FCW. These damages consist of scouring along the riverside of the Lower Chariton River Levee between approximate Stations 665+00 and 685+00 near the levee toe, the loss of grass cover on the levee slope, and the deposition of sand near the levee toe.

#### **Section 5: PURPOSE & NEED FOR ACTION**

The project purpose and need is to rehabilitate the damaged levee and restore the associated social and economic benefits. The Lower Chariton Drainage District received damages to sections of its levee during the 6 May 2007 declared flood event. Prior to the May 2007 event, the Lower Chariton Drainage District levee provided an approximate 50-year level of flood risk management. In its current damaged state, the Lower Chariton Drainage District levee is estimated to provide an approximate two-year level of protection. The existing condition exposes all private agricultural croplands to a high level of risk from future flooding. Failure to restore the flood risk management capability of the levee system would keep area residents' livelihood and social well-being in turmoil, subject to the continuous threat of flooding until a level of flood protection is restored. Failure to reconstruct the levee could adversely affect the tax base of the county and municipal government. In addition, loss of jobs and potential losses in agricultural production on lands previously protected by the levee would also be incurred.

#### **Section 6: ALTERNATIVES CONSIDERED**

#### "No Action" Alternative

The "No Action" Alternative would involve no construction and the levee would remain in its damaged condition. The No Action alternative would continue to expose agricultural croplands and associated structures to a high risk level of future flooding.

#### **Section 7: RECOMMENDED ALTERNATIVE**

The recommended repair action consists of repairing a riverside scour measuring approximately 1,000 feet long, 250 feet wide, and three feet deep near the levee toe (sta. 665+00 to 685+00) (see Site Detail A, Appendix I). The scour would be graded to the pre-flood ground elevation with compacted impervious material from a nearby borrow area. Sand deposits would be removed from the levee toe or graded to achieve proper drainage away from the levee toe. Levee slopes and disturbed areas would be seeded to reestablish the protective sod cover. Borrow would be obtained from riverward agricultural land damaged by the flood. Borrow would not be obtained from within existing adjacent scours, but scour edges would be excavated to enhance the hydrology and connectivity of scours and benefit the aquatic ecosystem. This is the most prudent and economical repair action considering the type and severity of damage. All construction areas would be seeded and mulched upon project completion.

#### Section 8: NATIONAL ENVIRONMENTAL POLICY ACT REVIEW

As part of the NEPA review for the proposed project, the CENWK circulated a Notice of Availability (Notice) of the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI), dated \_\_\_\_\_\_, 2008, with a thirty-day comment period ending on \_\_\_\_\_\_, 2008 to the public and resource agencies. The Notice was e-mailed to individuals, agencies, and businesses listed on the CENWK-Regulatory e-mail mailing list. The Notice informed these individuals that the EA and Draft FONSI were available on the CENWK webpage or that they

could request the EA and Draft FONSI in writing, in order to provide comment. The following comments were received and evaluated from coordination of the Notice:

(Section pending comments)

#### **Section 9: AFFECTED ENVIRONMEMENT**

The project area consists of agricultural row crop ground located on the Missouri River flood plain between river miles 227.5 and 238.7. The FCW protects approximately 19,000 acres of agricultural land.

Primary resources of concern identified during the evaluation included: noise levels, water quality, fish and wildlife, threatened and endangered species, wetlands, agricultural land, archeological and historical resources, floodplain, economics, and aesthetics. Projects impacts to other resources were determined to be no effect.

#### **Section 10: ENVIRONMENTAL CONSEQUENCES**

#### **Noise Levels**

The recommended plan, Alternative 1, would result in minor, short-term construction resisted noise impacts. These impacts are the result of the operation of heavy machinery during project construction. These noise levels would be in addition, but similar to, those produced by agricultural equipment which is routinely operated in the project area. No residences, businesses, churches, park areas or other areas sensitive to increased noise levels were identified in the project area. Noise from project construction could disturb the occasional boater on the nearby Missouri River or person(s) participating in outdoor recreation on private land within the project area.

The "No Action" alternative would produce no increase in noise levels in the project area.

#### Water Quality

The recommended plan, Alternative 1, could potentially result in minor, temporary construction related adverse impacts to water quality resulting from site runoff and increased turbidity. The minor impacts associated with the recommended plan would be avoided and/or minimized to the greatest extent possible by the implementation of Best Management Practices. Best management practices would minimize the incidental fallback of material into the river and creeks during construction and would minimize the introduction of fuel, petroleum products, or other deleterious material from entering into the waterway. Such measures could include use of erosion control fences; storing equipment, solid waste, and petroleum products above the ordinary high water mark and away from areas prone to runoff; and requiring that all equipment be clean and free of leaks. To prevent fill from reaching water sources by wind or runoff, fill would be covered, stabilized or mulched, and silt fences would be used as required. All appropriate measures will be taken to minimize erosion during and after construction.

In the "No Action" Alternative with the absence of a Federal action addressing levee improvements, a high water event could cause increased flooding in the project area and result in

substantial adverse impacts to the natural and human environment within the project area. Avoiding repair actions could result in adverse impacts to water quality from erosion and increased levels of nutrient loading and wastes, including runoff of pollutants from industrial sources, petroleum products, and non-point sources of human and animal wastes.

#### Fish and wildlife

The recommended plan, Alternative 1, would result in minor, temporary, construction related adverse impacts to wildlife resources. The impacts to wildlife resources would be related to noise and visual disturbance during the construction activity. No impacts to fishery resources would be expected to occur from the proposed action.

The "No Action" Alternative would have minimal effects on fish and wildlife resources. These impacts would arise from flooding within the now unprotected area. Aquatic and wetland species may benefit as more frequent flooding could occur in the now unprotected areas. Wetlands would likely recharge more often since they would be hydraulically connected to the Missouri River. Other terrestrial organisms could be temporarily displaced or have their habitat degraded by flooding.

#### **Threatened and Endangered Species**

The recommended plan would have no adverse effects on any federally-listed threatened or endangered species or their habitat. Pallid sturgeon (*Scaphirhynchus albus*) are found primarily in the Missouri River and Mississippi River. No work is proposed within the Missouri River. Indiana bats (*Myotis sodalis*) roost in trees that tend to be greater than 9 inches diameter breast height during the spring and summer, and hibernate in caves during the fall and winter. Levee work would occur on and adjacent to the existing levee within agricultural land and would not result in disturbance to trees suitable for bat roosting. No impacts to any state listed threatened or endangered species or their habitat were identified.

The "No Action" alternative would have no adverse effects on any federally-listed threatened or endangered species or their habitat. No impacts to any state listed threatened or endangered species or their habitat were identified.

#### Wetlands

No wetlands are located within the area of proposed work or borrow activity. The recommended plan would have no effects on wetlands. Borrow would be obtained from riverward agricultural land damaged by the flood. Borrow would not be obtained from within existing adjacent scours, but scour edges would be excavated to enhance the hydrology and connectivity of scours and benefit the aquatic ecosystem.

The "No Action" Alternative could result in benefits to wetlands located behind the degraded levees as these areas would be subject to a new level of future flooding.

#### Agricultural Land

The recommended plan would have a minimal adverse impact on agricultural production as some cropland would be temporarily out of production due to construction and borrow activity. Restoring the flood risk management capability of the levee will allow agricultural practices to

continue as previously conducted. Borrow would be obtained from riverward agricultural land damaged by the flood (see Site Detail A, Appendix I). Borrow would not be obtained from within existing scours, but scour edges would be excavated to enhance the hydrology of scours.

The "No Action" Alternative would adversely impact agricultural activity by exposing approximately 19,000 acres of agricultural lands to increased flooding. This loss of agricultural production would have related impacts such as lost income, lower tax base, and decreased land value.

#### Archeological and Historical Resources

The recommended plan would have no impact to sites listed on or eligible for inclusion on the National Register of Historic Places (NRHP). A background check of the NRHP and site location maps identified no previously recorded sites within or near the proposed project area. A Programmatic Agreement regarding implementation of the Public Law 84-99 program in Missouri, Kansas, Iowa, and Nebraska was signed by the Advisory Council on Historic Preservation, the Kansas City District, and the four State Historic Preservation Offices (SHPO) during the declared flood event of 1993.

After review of materials from previous cultural resources investigation by a qualified archeologist in 1993 and 1995, and previous coordination with SHPO, it was determined that the proposed borrow area is located within previously cleared/approved borrow sites; therefore, additional site investigations and coordination efforts are not required. The project will be coordinated with appropriate federally recognized Native American tribes (Tribes). If in the unlikely event that archeological material is discovered during project construction, work in the area of discovery will cease, the discovery would be investigated by a qualified archeologist, and the find would be coordinated with SHPO and the Tribes.

The "No Action" Alternative would result in no effects to archaeological or historical resources.

#### **Floodplain**

The recommended plan would restore an approximate 50-year level of flood protection to the existing Lower Chariton Drainage District levee system, which would equal the level that existed prior to the declared flood event of 6 May 2007. The area is located in the base floodplain and is subject to Executive Order 11988, "Floodplain Management". Since the proposed levee repair would restore this levee to its original alignment and pre-flood grade and cross section, no increase in floodwater surface elevations would occur. As the recommended plan would not directly or indirectly support more development in the floodplain or encourage additional occupancy and/or modify of the base floodplain, the Corps has determined that the recommended plan complies with the intent of Executive Order 11988.

The "No Action" Alternative would continue to expose all agricultural croplands previously protected to a high level risk of future flooding.

#### **Economics**

With the implementation of the recommended plan, the levees would be restored to a 50-year level of flood protection. Agricultural croplands protected by the levee prior to the flood damage

would continue to be protected against a 50-year flood event. Economic conditions are unlikely to change from those of pre-damage levee conditions with the repair of this levee system.

The "No Action" Alternative has a zero benefit to cost ratio and would continue to expose all agricultural croplands previously protected by the levee to a high level risk of future flooding. People's livelihood and social well-being would remain in turmoil, subject to the continuous threat of flooding until the level of flood protection is restored. Failure to reconstruct the levee could adversely affect the tax base of the county and the municipal governments. In addition, loss of jobs and potential losses in agricultural production on lands protected by the levee would also be incurred.

#### **Aesthetics**

The recommended plan would result in very minor and temporary adverse aesthetic impacts associated with the construction activity. The human population that could potentially be affected by the activity would be expected to be very low, restricted to the occasional boater on the Missouri River or person(s) participating in outdoor recreation on the private land in the project area. Upon completion of the project, the aesthetics of the project area would return to the pre-flood condition.

The "No Action" Alternative would have no effect on aesthetics.

## Section 11: SUMMARY OF ENVIRONMENTAL EFFECTS OF THE NON-RECOMMENED PLAN

The "No Action" Alternative is not been recommended because it would not meet the project purpose and need of rehabilitating the levee to a pre-flood level of flood risk management thereby restoring its associated social and economic benefits. The "No Action" alternative would have no permanent or temporary construction related impacts. The "No Action" alternative would continue to expose all agricultural croplands previously protected by the levee to a high level risk of future flooding and could adversely impact agriculture, water quality, and local economics. People's livelihood and social well-being would remain in turmoil, subject to the continuous threat of flooding until the proposed level of flood protection is restored. Failure to reconstruct the levee could adversely affect the tax base of the county and municipal governments. In addition, loss of jobs and potential losses in agricultural production on lands protected by the levee would also be incurred.

#### **Section 12: CUMULATIVE IMPACTS**

The combined incremental effects of human activity are referred to as cumulative impacts (40CFR 1508.7). While these incremental effects may be insignificant on their own, accumulated over time and from various sources, they can result in serious degradation to the environment. The cumulative impact analysis must consider past, present, and reasonably foreseeable actions in the study area. The analysis also must include consideration of actions outside of the Corps, to include other State and Federal agencies. As required by NEPA, the Corps has prepared the following assessment of cumulative impacts related to the alternatives being considered in this EA.

Historically, the Missouri River and its floodplain has been altered by bank stabilization, dams on the river and its tributaries, roads/bridges, agricultural and urban levees, channelization, farming, water withdrawal for human and agricultural use, urbanization and other human uses. These activities have substantially altered the terrestrial and aquatic ecosystem within the Missouri River watershed.

The Corps, which administers Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act, has issued and will continue to evaluate permits authorizing the placement of fill material in the Waters of the United States and/or work on, in, over or under a navigable water of the United States including the Missouri River and its tributaries. These levee repair projects typically result in minor impacts to the aquatic ecosystem.

The Corps, under the authority of the Public Law 84-99 Levee Rehabilitation and Inspection Program, has and will continue to provide rehabilitation assistance to Federal and non-Federal levee sponsors along the Missouri River which participate in the Public Law 84-99 Program. These projects typically result in minor, short-term construction related impacts to fish and wildlife and the habitats upon which they depend. Resources typically affected by this type of project generally include, but are not limited to, wetlands, floodplains, water quality, and fish and wildlife habitat. It should be noted that these projects do not result in an addition to flood heights or reduced flood plain area but are merely a form of maintenance to that which had previously existed.

Of the reasonably foreseeable projects and associated impacts that would be expected to occur, further urbanization of the floodplain will probably have the greatest impact on these resources in the future. The possibility of wetland conversion and the clearing of riparian habitat are ever present, and these activities also tend to impact these resources. Construction of additional agricultural levees may occur provided land becomes available for this purpose; however, the trend seems to be moving in the opposite direction and towards urban development. The era of major reservoir construction has likely past, thus impacts from these projects likely will not occur.

The adverse effects associated with the proposed project are short term/minor associated with project construction. These minor adverse effects would be greatly offset by restoring the flood risk management capability and its associated social and economic benefits of the existing levee system. The PL84-99 Program is designed to merely bring the damaged levees back to pre-existing conditions. Thus, no significant cumulative impacts associated with the proposed rehabilitation of the existing levee system have been identified.

#### **Section 13: MITIGATION MEASURES**

The recommended plan will result in no impacts to mitigable resources as defined in USACE Planning regulations or under Section 404 of the Clean Water Act. Therefore, no mitigation measures are warranted or proposed. The excavation of borrow around the perimeter of scours will enhance the hydrology and connectivity of scours and benefit the aquatic ecosystem. All disturbed areas will be seeded and mulched upon project completion.

#### Section 14: COMPLIANCE WITH ENVIRONMENTAL QUALITY STATUTES

Compliance with Designated Environmental Quality Statutes that have not been specifically addressed earlier in this report is covered in Table 1.

#### Section 15: CONCLUSION & RECOMMENDATION

The flood risk management level achieved by the recommended plan would be the same as the original pre-flood levees. The recommended plan would result in no impacts to any Federally-listed threatened or endangered species or their habitat. The recommended plan would result in no impacts to any properties listed, proposed for listing, eligible for listing, or potentially eligible for listing in the National Register of Historic Places. Areas of the existing levee sections damaged by flooding would be temporarily disturbed by the proposed construction activity.

The adverse effects associated with the proposed project are short term/minor associated with project construction. These minor adverse effects would be greatly offset by restoring the flood risk management capability and its associated social and economic benefits of the existing levee system. Alternative 1 – In-Place Repairs meets the project purpose and need of rehabilitating the flood damage reduction capability and its associated social and economic benefits of the existing levee system. Of the two alternatives considered, Alternative 1 –In-Place Repairs is recommended because it is a prudent repair action with a positive cost/benefit ratio, will reestablish pre-flood levee grade and protective sod cover, and is consistent with the protection of the nation's environment.

Based on coordination with the resource agencies and input gained through public interest review as documented in this Environmental Assessment, the Kansas City District – Corps of Engineers has made a preliminary determination that this project would have no significant impacts on the human environment including natural and cultural resources and Federally-listed threatened and endangered species; therefore, a Draft Finding of No Significant Impact (FONSI) has been prepared. This NEPA decision document will be forwarded to the District Engineer with a recommendation for approval following the end of the public review period and resolution of comments.

#### **Section 16: PREPARERS**

This EA and the associated draft FONSI were prepared by Mr. Neil Bass (Environmental Resources Specialist), with relevant sections prepared by Mr. Timothy Meade (Cultural Resources). The address of the preparers is: U.S. Army Corps of Engineers, Kansas City, District; PM-PR, Room 843, 601 E. 12th St, Kansas City, MO 64106.

# Table 1 Compliance of Preferred Alternative with Environmental Protection Statutes and Other Environmental Requirements

Federal Polices	Compliance
Archeological Resources Protection Act, 16 U.S.C. 470, et seq.	Full Compliance
Clean Air Act, as amended, 42 U.S. C. 7401-7671g, et seq.	Full Compliance
Clean Water Act (Federal Water Pollution Control Act), 33 U.S.C. 1251, et seq.	Full Compliance
Coastal Zone Management Act, 16 U.S.C. 1451, et seq.	Not Applicable
Endangered Species Act, 16 U.S.C. 1531, et seq.	Full Compliance
Estuary Protection Act, 16 U.S.C. 1221, et seq.	Not Applicable
Federal Water Project Recreation Act, 16 U.S.C. 4601-12, et seq.	Full Compliance
Fish and Wildlife Coordination Act, 16 U.S.C. 661, et seq.	Full Compliance
Land and Water Conservation Fund Act, 16 U.S.C. 4601-4, et seq.	Not Applicable
Marine Protection Research and Sanctuary Act, 33 U.S.C. 1401, et seq.	Not Applicable
National Environmental Policy Act, 42 U.S.C. 4321, et seq.	Full Compliance
National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470a, et seq.	Full Compliance
Rivers and Harbors Act, 33 U.S.C. 403, et seq.	Full Compliance
Watershed Protection and Flood Prevention Act, 16 U.S.C. 1001, et seq.	Full Compliance
Wild and Scenic River Act, 16 U.S.C. 1271, et seq.	Not Applicable
Farmland Protection Policy Act, 7 U.S.C. 4201, et. seq.	Full Compliance
Protection & Enhancement of the Cultural Environment (Executive Order 11593)	Full Compliance
Floodplain Management (Executive Order 11988)	Full Compliance
Protection of Wetlands (Executive Order 11990)	Full Compliance
Environmental Justice (Executive Order 12898)	Full Compliance

#### **NOTES:**

- a. <u>Full compliance.</u> Having met all requirements of the statute for the current stage of planning (either preauthorization or postauthorization).
- b. Partial compliance. Not having met some of the requirements that normally are met in the current stage of planning.
- c. Noncompliance. Violation of a requirement of the statute.
- d. Not applicable. No requirements for the statute required; compliance for the current stage of planning.

#### Clean Water Act, Section 404 and 401

The recommended plan would not involve activities regulated under the Sections 404 and 401.

Clean Water Act, Section 402

A NPDES permit was obtained and is located in Appendix II.

Endangered Species Act, Section 7

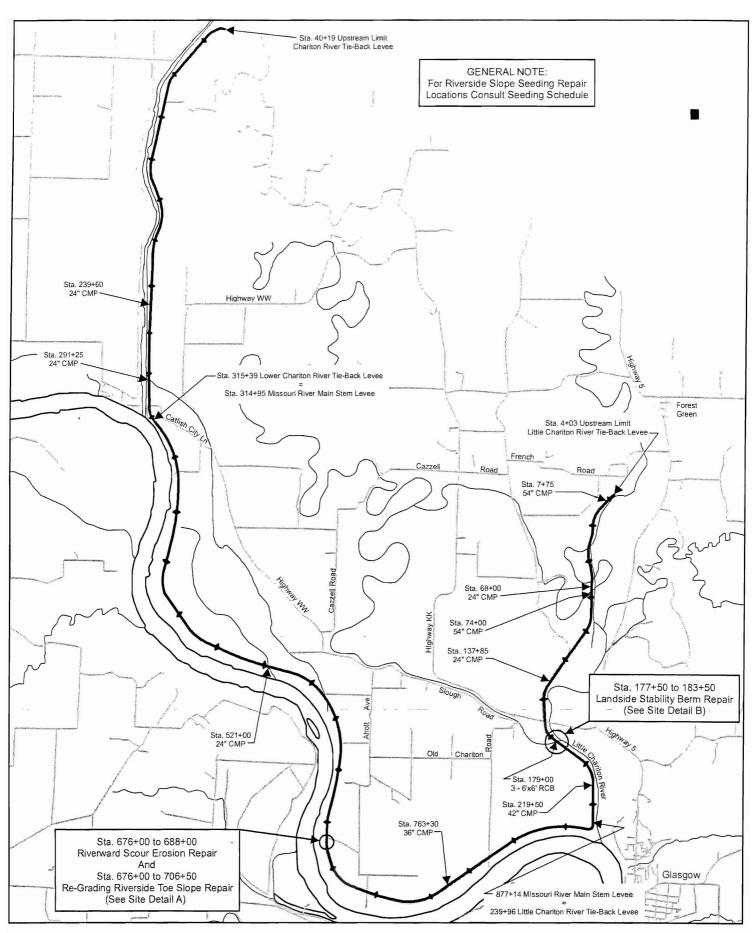
The Corps of Engineers has made a determination that no impacts to any federally listed threatened or endangered species or their habitat would occur with the project action. Coordination of ESA would be completed upon review of this EA and concurrence of this determination with the USFWS.

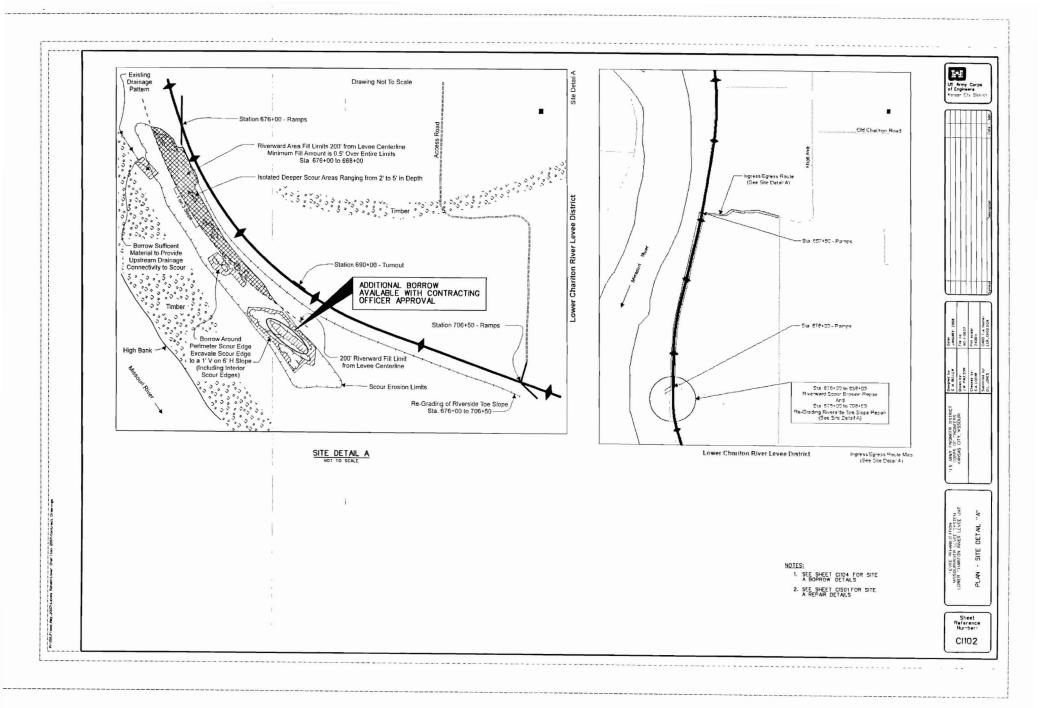
National Historic Preservation Act

No sites listed on or eligible for listing on the National Register of Historic Places are located within or near the proposed project area. No further coordination is required.

## **APPENDIX I – PROJECT MAPS**

Lower Chariton Drainage District P.L. 84-99 Levee Rehabilitation Project Chariton County, Missouri May 2008





### APPENDIX II – NEPA REVIEW

Lower Chariton Drainage District P.L. 84-99 Levee Rehabilitation Project Chariton County, Missouri May 2008



Matt Blunt, Governor • Doyle Childers, Director

## TOF NATURAL RESOURCES

www.dnr.mo.gov

NOV 3 0 4007

U.S. Army Corps of Engineers, KC District 700 Federal Building, 601 E. 12th Street Kansas City, MO 64106

#### Dear Permittee:

Pursuant to the Federal Water Pollution Control Act, under the authority granted to the State of Missouri and in compliance with the Missouri Clean Water Law, we have issued and are enclosing a General State Operating Permit for U.S. Army Corps of Engineers, KC District.

Please review the requirements of your permit. Monitoring reports that may be required by this permit must be submitted on a periodic basis. Copies of the necessary report forms, if required, are enclosed and should be mailed to the regional office listed below. Please contact that office for additional forms.

This General Permit is both your federal discharge permit and your new state operating permit and replaces all previous state operating permits and letters of approval for the discharges described within. In all future correspondence regarding this permit, please refer to your general permit number as shown on page one of your permit.

If you were affected by this decision, you may appeal to have the matter heard by the administrative hearing commission. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission.

If you have any questions concerning this permit, please do not hesitate to contact the Water Protection Program at PO Box 176, Jefferson City, MO 65102 (573) 751-1300.

Sincerely,

WATER PROTECTION PROGRAM

NPDES Permit and Engineering Section

Enclosure

07 DEC -5 PM 2: 30



#### STATE OF MISSOURI

#### DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



## MISSOURI STATE OPERATING PERMIT WATER POLLUTION CONTROL PROGRAM

#### General Operating Permit

In compliance with the Missouri Clean Water Law, (chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.:

MO-R100043

Owner: Address: U.S. Army Corps of Engineers, KC District 700 Federal Building, 601 E. 12th Street

Kansas City, MO 64106

Continuing Authority:

Same

Same

Facility Name: Facility Address: U.S. Army Corps of Engineers, KC District 700 Federal Building, 601 E. 12th Street

Kansas City, MO 64106

Legal Description:

See Page 2, Various County

Receiving Stream: First Classified Stream See Page 2 See Page 2

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein.

FACILITY DESCRIPTION All Outfalls, SIC 1629

Construction or land disturbance activity (e.g., clearing, grubbing, excavating, grading, and other activity that results in the destruction of the root zone) that are performed by or under contract to a city, county, or other governmental jurisdiction that has a storm water control program for land disturbance activities that has been approved by the Missouri Department of Natural Resources.

This permit authorizes only wastewater, including storm waters, discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System, it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law

May 31, 2007

November 30, 2007

Effective date

issue date

Doyle Childers, Director, Department of Natural Resources Executive Secretary, Clean Water Commission

May 30, 2012

Expiration date MO 780-1481 (7-94) Edward Galbraith Director of Staff, Clean Water Commission Page 2 Permit Number MO-R100043

This permit accompanies the applicant's General Permit 41 (GP0-41) for the repair of levees due to damages from flooding.

Repair activities may take place anywhere along the Missouri and Grand Rivers and tributaries thereof. Location would be in any county along these waterways from Rulo Nebraska to Saint Louis Missouri.

Detailed receiving stream information is available upon request.